



Fig.1

1 (BgII)

CGGG GCAAACGGCGGACGCTGCTGTTAGCCCCGCTTGAAACA AATGC 47

-35 -10

CGTCTGA CGCCACTTCAGACGGCATTATAATAAGCGCTGCTAGATAACTAGGG 107

S.D.

AAATTCAAATTAAAGTTAGAATTATCCCTATGAGAAAAAGCCGCTAAGCCGGTATAAAC 167

M R K S R L S R Y K Q

AAATAAACATTTGAACCTGTTGTCGCAGGCGTAACIGCAAGAACAGCAGCAGAGCCCTGA 227

N K L I E L F V A G V T A R T A A E P D

CAGCATTGTTATACGGATTGTTATCGTCGCTATGATGTATTGGATGCGGGCGAATTAG 287

S I V Y T D C Y R R Y D V L D A G E F S

CCATTTCGGTATCAATCACAGCACACATTGCGAACGACAAAACCATAATTAAATGGAAT 347

H F R I N H S T H F A E R Q N H I N G I

TGGAACCTTGGAACCGGGAAAACGTCAATTACGCAAGTTGACGGCATTCCCAAAGA 407

G N F W N R A K R H L R K F D G I P K E

GCATTTCGGTATTTAAAGGAGTGCAGACGGCTTTTAACAAACAGTIGAGATAAAAG 467

H F E P Y L K E C E R R F *

-35

TTCTTGTCCATTAAACAAATTAGTAAATCGAGTTATCCTAGTGTGTCAGGACGGC 527

-10

S.D.

CCCTAATTATTTACAATTGATACAATTGTTTCATCAAAGGAGAAAATCTATGCG 587

M R

GGCACGGCTGCTGATAACCTATTCTTTGGTTTTATTATCCGCTGCGGGACACT 647

A R L L I P I L F S V F I L S A C G T L

GACAGGTATTCCATCGCATGGCGGAGGCAAACGCTTGGGTGCAACAAGAACGTTG 707

T G I P S H G G G K R F A V E Q E L V A

CGCTTCTGCCAGAGCTGCCGTTAAAGACATGGATTACAGGATTACACGGACAAAAGT 767

A S A R A A V K D M D L Q A L H G R K V

TGCATTGTACATTGCAACTATGGCGACCAAGGTTAGGCAGTTGACAGGGGTGCTA 827

A L Y I A T M G D Q G S G S L T G G R Y

CTCATTGATGCACTGATTGCCGCGAATACATAACAGCCCTGCGTCCGCACCGATTA 887

S I D A L I R G E Y I N S P A V R T D Y

CACCTATCCGCGTTACGAAACCACCGCTGAAACAACATCAGGCGGTTGACGGGTTAAC 947

T Y P R Y E T T A E T T S G G L T G L T

CACTTCATTATCTACACTTAATGCCCTGCACTCTCGCGACCCAAATCAGACGGTAGCGG 1007

T S L S T L N A P A L S R T Q S D G S G

AAGTAGGAGCAGTCGGCTAAATATGCCGGATGGGGATTATCGAAATGAAACCTT 1067
 S R S S L G L N I G G M G D Y R N E T L
 GACGACCAACCGCGCGACACTGCGCTTCTTCCACTGGTACAGACCGTATTTCT 1127
 T T N P R D T A F L S H L V Q T V F F L
 GCGGGCATAGACGTGTTCTGCCATGCCATACAGATGTGTTATTAACATCGA 1187
 R G I D V V S P A N A D T D V F I N I D
 CGTATTCGAAACGATACGCAACAGAACCGAATGCACCTATAACAATGCCGAAACACTGAA 1247
 V F G T I R N R T E M H L Y N A E T L K
 AGCCAAACAAAATCGGAATATTCGAGTAGACAGAACCAATAAAAATTGCTCATCAA 1307
 A Q T K L E Y F A V D R T N K K L L I K
 ACCCAAAACCAATGCGTTGAGCTGCTATAAGAAAATTACGCATIGGGATGGGCC 1367
 P K T N A F E A A Y K E N Y A L W M G P
 GTATAAAAGTAAGCAAAGGAATCAAACCGACCGAAGGATTAATGGTCGATTCTCCGATAT 1427
 Y K V S K G I K P T E G L M V D F S D I
 CCGGCCATACGGCAATCATACGGTAACCTCCGCCCCATCCGTAGAGGCTGATAACAGTC 1487
 R P Y G N H T G N S A P S V E A D N S H
 TGAGGGGTATGGATAACAGCGATGAAGCAGTGCACAAACATAGACAAGGGCACCTIGATT 1547
 E G Y G Y S D E A V R Q H R Q G Q P *
 S.D.
 CACACTGCCATAACCGCTGCTGCCAAGGAAAACAAAATGAATTGCTATTCAAAAATT 1607
 M N L P I Q K F
 CAATGCGCTTGCAGCGCAATATCGTGCCTGCAAATCCCCATTAGTCATGCCAACGG 1667
 M M L F A A A I S L L Q I P I S H A N G
 TTGGATGCCGTTGGCGATGATAATGCAGGCAAAACACTACGAACGGTGGCAAATA 1727
 L D A R L R D D M Q A K H Y E P G G K Y
 CCATCTGTCGGTAATGCTCGCGCAGTGTAAAAATGGGTTTGCCTGCCATCAACATT 1787
 H L F G N A R G S V K N R V C A V Q T F
 TGATGCAACTCGGGTGGCCATACTGCTTACACACGAACGGACAGGGTTGAAGG 1847
 D A T A V G P I L P I T H E R T G F E G
 CATTATCGGTTATGAAACCCATTTCAGGACACGGACACGAAGTACACAGTCCGTTGCA 1907
 I I G Y E T H F S G H G H E V H S P F D
 TAATCATGATTCAAAAGCACTTCGATTCAGGGGGCGTAGACGGCGTTTACCGT 1967
 N H D S K S T S D F S G G V D G G F T V
 TTACCAACTTCATCGGACAGGGTGGAAATACATCCCGCAGACGGATATGACGGGCCTCA 2027
 Y Q L H R T G S E I H P A D G Y D G P Q
 AGGGGGGGTATCCGAAACCACAAGGGCAAGGGATATACAGCTACCATATCAAAGG 2087
 G G G Y P E P Q G A R D I Y S Y H I K G
 AACCTCAACCAAAACAAAGATAAACACTGTTCCGCAAGCCCCTTTCAGACCGCTGGCT 2147
 T S T K T K I N T V P Q A P F S D R W L

AAAAGAAAATGCCGGTGCGGCTTCGGTTTCAGCGTGCGGATGAAGCAGGAAACT	2207
K E N A G A A S G F L S R A D E A G K L	
GATATGGGAAAACGACCCCGATAAAAATTCGGCTAACGTATGGATGATATTCCGG	2267
I W E N D P D K N W R A N R M D D I R G	
CATCGTCCAAGGTGCGGTTAACCTTTAACGGGTTTCAGGGATGGGAGTTGGGC	2327
I V Q G A V N P F L T G F Q G L G V G A	
AATTACAGACAGTGCCTAAGCCCGTAACCTATGCCGCAGCACGGAAAACCTTACAGGG	2387
I T D S A V S P V T Y A A A A R K T L Q G	
TATTCAACAATTAGAAATTAAAGTCCGAAGCACAACCTGCCGCCGAGCCTATTACA	2447
I H N L G N L S P E A Q L A A A S L L Q	
GGACAGTGCCTTGCCTAAAAGACGGCATCAATTCCGCCAGACAATGGGATGCCA	2507
D S A F A V K D G I N S A R Q W A D A H	
<i>PstI</i>	
TCCGAATATAACAGCAACAGCCAAACTGCCCTGCCGTAGCAGAGGCTGCAGGTACGGT	2567
P N I T A T A Q T A L A V A E A A G T V	
TTGGGGAGGTAAAAAGTAGAACTTAACCGACCAAATGGATGGTTAAAATACCGG	2627
W G G K K V E L N P T K W D W V K N T G	
CTATGAAAAACCTGCTGCCGACCTATGCAGACTGTAGACGGGAAATGGCGGGAAAAA	2687
Y E K P A A R P M Q T V D G E M A G K N	
TAAGCCACCGAAACCAAGTACGCAGCAACACTCTACACACTCTGATAACAATATCGGCTT	2747
K P P K P S T Q Q H S T H S D N N I G L	
ACCTGCCCATATGTTAAACCTGATACATCTATTCTCCGACAGGAACAATTCAAGACCG	2807
P A P Y V K P D T S I S P T G T I Q D R	
CATCAGATGGACAAAATCCAAGTTCCCTACTGAGAAATCTTAAATGGACATTCAAAGC	2867
I R W T K S K F P T E K S L N G H F K A	
TCATGGAAAAGAATTGGCGATATAACCATTGAAGACTACCAAAAAATGGGTCTGATTT	2927
H G K E F G D I T I E D Y Q K M A S D L	
GTTATCAAAACAGACATCGGACAAGATATTAGGTTATCAGACGGAACATAGACGAGTGC	2987
L S K Q T S D K I L G Y Q T E H R R V R	
CTATGATATCAATAACAATATCTATGTTGCCATCCAAAACATTCAAAC	3047
Y D I N N N I Y V L A N P K T F K I K T	
<i>Eco RI</i>	
AATGTTAAACCAAACCTAGGAAAGGAGTTATGATGGAAATTCAGGGAAAAAGACATGGG	3107
M F K P N L G K E Y Y D G E F K K D M G	
AAATTGACGGAGAAATATGGCTACATIGTCCIGTTGCCAACIGAAGTTATGGACTATG	3167
N *	
ATATCTGACGTTGTCAGGGAAAATACAGGAGAAACTAATATAGATGGGGCTTA	3227
<i>HindIII</i>	
ATGAAATGACACTTGCGGAGGGAAAGCTAACGCAAAAGGCTTACCAATCAGATAAA	3287